

VEGA[™] Rugged Housing



Installation Guide

2052 Model

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Vega 2050 Series detailed Web-Interface User Guide, available at:

https://www.redvisioncctv.com/installation-sheets/?category=vega

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1.0 Introduction

Thank you for choosing the Redvision VEGA™ rugged camera housing; designed for use in exposed outdoor locations. The Vega™ range of products offers rugged enclosures with features from simple empty enclosure, to intelligent wiper and auxiliary control, with a variety of power supply options. Please study this guide thoroughly before installing, maintaining, and using the product.

1.1 Product Features

The Vega™ 2050 range offers a rugged, safe enclosure, with a 2 megapixel, auto-focus camera module and integral LED IR ring factory-fitted. The housing can be installed in both upright and hanging (under-canopy) orientations, and provides cable management and a convenient electrical connection point for power and user connections.

1.2 Instructions for the Disposal of Electric and Electronic Equipment



The Wheelie Bin symbol on this product or its packaging indicates that the product is required to be disposed of in an acceptable manner. This is in accordance with the WEEE Directive 2002/96/EC. For more information regarding the correct disposal of this unit at the end of its life please contact the company from which this unit was purchased.

1.3 Safety





THIS CAMERA SYSTEM MUST BE INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

- Installation of this system should be carried out by suitably trained and qualified technicians in accordance with local electrical codes.
- To prevent the risk of electric shock do not expose the electrical connectors on the camera or the inside of the control box to water before or during installation. Condensation/ misting may occur if water is allowed to enter the housing before power is applied.
- 3. Do not drop the product.
- 4. Avoid the use of alcohol or solvent-based cleaners. The product should be cleaned with clean water and non-abrasive material.
- 5. The camera system should be installed where it cannot be tampered with by unauthorised personnel.
- 6. The products should be securely fastened to a structure of sufficient strength to support it. Allowance should be made for additional loads caused by local wind effects.

1.4 Parts Supplied/ Available



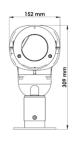
Part	Quantity
1: Vega™ 2052 Housing assembly (Optional PED mount shown)	1
2: Installation Kit:	
Allen Key Large (5mm) – Top cover removal	1
Allen Key Medium (3mm) – Wall bracket cover removal	1
Allen Key Small (2.5mm) – Front bezel bracket arm lock ring fixing	1
3: Bracket locking bar (optional, must be ordered separately)	

If parts appear to be missing or damaged this should be reported immediately to your supplier.

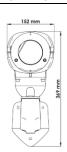
2.0 Specifications/Dimensions

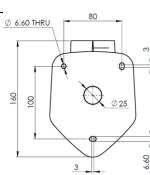
Camera	2MP Sony Starlight sensor; ICR filter true day/night switching
WDR	120dB
Min. Lux	Colour: 0.01Lux (F1.6, AGC ON) Mono: 0Lux (IR LED ON)
Field of View	H: 101°(W) ~ 28°(T) V: 54° (W) ~ 16° (T)
Max. resolution	1920x1080,
Max. frame rate	30fps (NTSC setting)
Encoding	H.264/H.265/MJPEG
IR max. distance	60m reflective, Smart IR
Housing material	Die-Cast Anodised Aluminium with corrosion-resistant plating (Marine finish available)
Window material	Toughened Glass (Polycarbonate window available as option)
Body colour	RAL 7035 Light Grey (Custom RAL colours available)
Weather-resistance	IP67
Impact rating	IK10 (excluding glass, optional polycarbonate window available upon request)
Power options	PoE (11W max.)12VDC (11W max.)
Power input protection	2.5A Anti-surge Fuse
External Dimensions	358D x 134H x 152W mm max.
Weight	5Kg (incl. wall bracket)
Mounting options	Standard: Wall bracket with cable managed entry
	PED: Cable managed pendant/pedestal bracket with 4" PCD











3.0 Installation

The Vega 2050 series is supplied ready-to-fit; it can be powered via PoE (RJ-45 or direct wiring), providing a plug and play experience. Easy connection points are provided on two circuit boards in the housing chamber. It is important to ensure that the housing is not opened or re-sealed under damp or wet conditions, as moisture may settle inside the housing chamber. This section details the physical installation and mounting of the housing assembly.

3.1 Wall Bracket (Standard fitting):

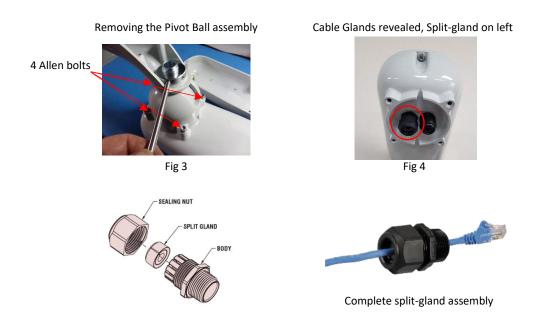
• Use the three mounting holes to fix the bracket to the wall (Fig 1); the bracket can be removed from the housing body to aid fixing, by removing the Pivot Ball (shown below). The upper-left and bottom holes are elongated to aid levelling during fixing.



• Two cable entry points are provided (fig 2); at the rear of the baseplate (25mm & hole), for cables passed through the wall, and at the front; located at the bottom of the wall arm cover (20mm threaded for conduit). A screw cap is supplied for this access point, in the event it is not used.

3.2 Removing the bracket to aid wall fixing:

• Remove the 4 Allen bolts securing the Pivot Ball to the housing body, using the 5mmm Allen wrench (Fig 3). Lifting the Pivot Ball and bracket arm away from the housing body reveals 2 cable entry glands for access into the housing enclosure (Fig 4); one of which is a split-gland; to allow a pre-made RJ45 cable to enter the housing. Ensure that the rubber O-rings remain on the screws.



&

- Ensure that any unused Glands are closed off, to avoid damp air entering the housing.
- The wall bracket arm can now be attached to the mounting surface.
- The cable(s) can be passed through the bracket arm by removing the front cover of the arm.

Bracket cover fixing screws



Fig 5

Bracket interior

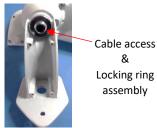


Fig 6

- Remove the wall bracket front cover (Fig 5). Using the medium Allen wrench provided (3mm), unscrew the 4 fixing bolts and pull the cover away from the bracket arm.
- The cable access hole and locking ring assembly are now visible (Fig. 6).
- Pass the cable(s) into the arm and through the cable access hole (16mm ©), into the Pivot ball assembly (Fig 7):



Fig 7

- Offer the housing body up to the Pivot Ball and pass the cable(s) through the gland(s), ensuring unused glands are closed off to prevent damp air ingress.
- Attach the housing body to the Pivot Ball assembly and refit, using the 4 Allen bolts. Ensure the rubber O-ring seals are still fitted on each bolt. Tighten the locking ring using the optional wrench bar (Fig 8).
- Upon re-fitting the housing body to the bracket arm; position the housing and tighten the locking ring with the wrench bar, and tightening one of the grub screws using the supplied Allen wrench (2.5mm) This fixes the ring in place and ensures the housing remains firmly in position (Fig 9)



Fig 8
Using the optional wrench bar to tighten the lock ring



Fig 9 Grub screw for fixing Locking ring in place

3.3 PED mount: fitting instructions

The PED mount is an alternative mounting system, designed to replace the standard wall bracket assembly. The PED is designed to mount the VEGA™ housing to poles and towers using a 4" PCD fitting. The PED attaches to the housing Pivot Ball in the same way as the wall bracket; with the same cable access. Removal is the same process as described in section 3.2, Fig 3.

• To tighten the lock ring in the PED, first remove the PED column cover, by removing the Allen screw as shown in Fig 10 below. Tighten using the optional wrench bar (Fig 11).



Fig 10

Remove the Cover retaining screw



Fig 11

• Fix, pass the cable(s) through; attach the housing body; position the housing and tighten the lock ring as described in section 3.2, figs 8 & 9.

4.0 Making the connections

4.1 Removing the housing cover

First, loosen the front bezel Allen bolts by 3 turns. This will allow the housing cover to be removed easily (fig 8):



Loosen the 2 Allen bolts to release the front bezel

Fig 8

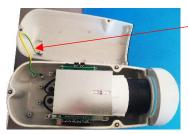
• Next, loosen the 3 Allen bolts securing the Housing cover (Fig 9). Be aware that silicon O-rings are fitted on the inside of the screw holes. These must remain in place, to provide an effective weather-seal.



Unscrew the 3 Allen bolts securing the housing

Fig 9

• Gently pull the housing cover backwards and upwards, noting that an earthing strap connects the housing cover to the base. Ensure that the earthing strap remains connected at all times (Fig 10). ▲ Take care to ensure that the earth strap is not trapped when refitting the housing cover.



Earthing strap, bonding the cover to the housing base

Fig 10

• Ensure that the integral weather seal and O-rings are not disturbed, removed or damaged in any way (Fig 11). Moisture ingress may occur if the seal is compromised, warranty cover will be void in this case.



Fig 11

Weather seal and O-ring locations

4.2 Connection boards

The Vega™ 2050 Series is fitted with two connection boards, to make power, input & output connections quick and easy. One board provides all incoming power and data connections (Fig 13):

- RJ45 for Data + PoE
- J3: 8-way connector for direct Cat5e wiring (Data + PoE) (follows RJ45 pin numbers)
- J2: 12VDC connection (fused @ 2.5A).

Note: Only use one power source at any one time; damage could occur if multiple power sources are connected!

The second board provides audio in/out and alarm in/out connections.

4.3 Power board layout



4.4 Alarm & Audio board layout

Specifications:

Alarm I/O	Voltage free, configurable N/O, N/C
Audio I/O	Line-level
Audio	Configurable: G.711 ALAW, G.711 ALAW, RAW_PCM
compression	

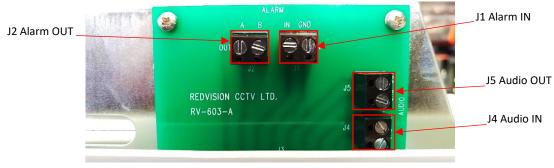


Fig 13

5.0 Accessing the camera's web interface

The Vega 2050 Series camera offers a fully-functional web interface for viewing live images, listening to audio and configuring the camera. The following section details how to access the web interface and configure the camera for basic operation. A web link is provided at the end of this section to download a complete web-interface guide for configuring the camera.

5.1 How to access your Vega™ 2050 series camera:

Your camera has been pre-configured as **192.168.0.120** IP address. Your computer must be set to operate in the same IP address range in order to connect to the camera. Use **Internet Explorer** browser to access the camera's web interface (some features, buttons and settings will not be available using other browsers).

1. Login



CAUTION

You must use <u>Internet Explorer</u> (v7 and above) to access the web management system; otherwise, some functions may be unavailable. Microsoft Edge browser will not allow full functionality, as it does not support Active X plugins.

 Open Internet Explorer, enter the IP address of the IP camera (default value: 192.168.0.120) in the address box, and press Enter.

The login page is displayed, as shown in Fig 14.

Fig 14. Login page



- Enter the user name and password.
- The default user name is admin. The default password is admin. Change the password when you log in to the system for the first time to ensure system security.
- You can change the system display language on the login page.
- Click to proceed. The main page is displayed.

2. Main Page Layout

From the main page, you can view real-time images, receive alarm and fault notifications, set parameters, change the password, and log out of the system. Fig 15 shows the main page layout.

Fig 15. Main page layout



3. Active X installation

• You will be prompted with a message "Download the latest plugins" as shown in Fig 16, when you log in to the web management system for the first time.

Note: The computer must have administrator rights assigned, and standard security settings to complete this procedure.

Fig 16. Download plug-ins page:



• Click Download and setup, then download and setup the plug-in:

Fig 17. Run the plug-in

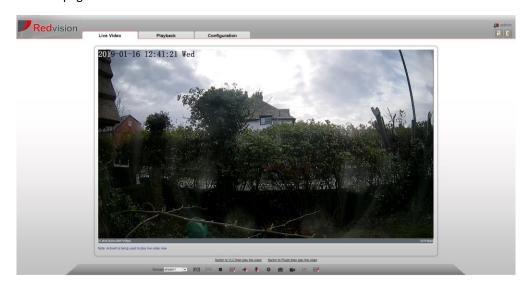


- Click "Run", install the plug-in as prompted. You will need to close Internet Explorer manually as part of the process; the Active X installation will not continue if Internet Explorer remains open.
- · Reopen the browser after installing.

4. Viewing Live Video

To browse real-time videos, click Live Video. The Live Video page is displayed, as shown in Fig 18.

Fig. 18 Live Video page



5. Setting Zoom Position

NOTE: The motorised Zoom function is designed as a one-time setting, made at the time of installation. It is **not** designed for continual use and is best performed in daytime, where good light levels are present; allowing accurate focusing. The lens will then automatically adjust the focus at night-time and daytime switching. Once set, leave the lens at the desired position and close the PTZ control panel.

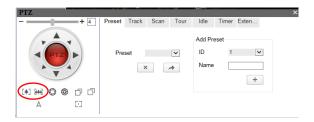
• To set the Zoom position; click the PTZ button at the bottom of the screen, shown in Fig 19.

Fig 19. PTZ Button (circled in red)



• The PTZ control panel is displayed.

Fig 20. PTZ control panel



- Click the icon on the left to zoom in and the icon on the right to zoom out. Allow a few seconds for the auto-focus system to accurately attain the correct focal position.
- Should auto-focus be unable to set the correct focal position accurately (due to strong backlight, lack of detail and definition in the scene, or sun flare); the lens can be manually adjusted; using the next two icons. Adjust to find the sharpest image:



• Once set, close the PTZ control panel (X). No other PTZ functions are enabled for this model.

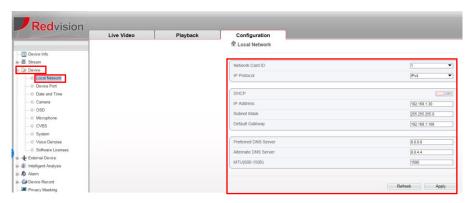
6. Setting a new fixed IP address

The 2050 Series camera has been shipped with a static IP address of 192.168.0.120. This will need to be changed to match the IP address range of your network.

 From the Web interface live screen; click the Configuration tab (you will need to be logged in as an Administrator to do this).



• Using the menu tree on the left-hand side; click Device, then Local Network:



- Choose TCP/IP v4 or v6 as required; type the new fixed IP address of the camera into the IP Address field; with
 Subnet Mask and Default Gateway address (if connecting exclusively to an NVR; use the NVR's fixed IP address for
 the Gateway). Set DNS addresses if outbound/ internet access is required. MTU setting: Most LAN networks will
 accept the default setting of 1500; however, for outbound/ internet access; Routers may require a setting of 1492 or
 lower. Check with the Internet Service Provider (ISP) for the correct figure.
- Click APPLY when finished. Wait for 90 seconds for the camera to reboot and apply the new fixed IP address.
- You will need to connect to the camera using the new IP address now.
- DHCP: <u>Only</u> enable the <u>DHCP</u> button if you wish the camera to acquire an IP address automatically from the
 network's resident DHCP server. Typically; you will need to agree a range of reserved DHCP address with the
 Network Administrator beforehand. You may need the MAC address of each camera in advance. This can be found
 on the <u>Device Info</u> page at the top of the menu tree.



• Configuring the system in more detail is now possible. For detailed help with the camera configuration; please refer to the Vega 2050 Web-Interface User Guide, available at:

https://www.redvisioncctv.com/installation-sheets/?category=vega

6.0 WARRANTY INFORMATION

Redvision CCTV limited (Redvision) warrants the buyer that the product will, on the date of shipment, be free from defects in material & workmanship and will conform to Redvision's specifications, provided to the buyer. If any defect in material or workmanship appears in the product, Redvision will, at its discretion, either repair or replace the defective product without charge at Redvision's customer service centre or authorised repair facility or credit or refund the purchase price of the defective product, provided:

- The defect appears within 36 months from the date of purchase.
- Examination of the product confirms that the claimed defect actually exists.

Buyer shall follow Redvision's instructions regarding return of the defective product and no product will be accepted for repair, replacement, credit or refund without:

- Buyer or an authorised representative of the buyer first contacting Redvision Technical Support for assistance and actual confirmation of suspected defect or fault.
- Written authorisation of Redvision or in accordance with Redvision's written instructions, including an official Return Merchandise Authorisation number (RMA), issued by Redvision CCTV Ltd.

In the case of any such return the buyer shall bear the risk of loss or damage and shall prepay all transportation charges to Redvision. The replaced product shall become Redvision's property. In no event shall Redvision be responsible for de-installation or reinstallation of the product or for the expenses thereof. If it is determined that returned product is not defective, the buyer shall pay Redvision all costs of handling, inspection, repairs and transportation at Redvision's then prevailing rates.

With respect to product not manufactured by Redvision, to the extent permitted, extends the warranties and affords the remedies to the buyer given to Redvision by its vendor of said products. The foregoing warranties do not extend:

- to expendable items, including SD Cards and Hard Disks
- to experimental or development products
- to product which has been subjected to misuse, neglect, accident or abuse;
- to the unauthorised repair or alteration by anyone other than Redvision;
- to improper installation, storage or maintenance by anyone other than Redvision; to product used in material violation of Redvision's instruction or to product which has had its serial number or month and year of manufacture or shipment removed, defaced or altered or to software.

The term "software" means a set of logical instructions and table of information which guide the functioning of a processor. Such set may be contained in any medium whatsoever including, without limitation, hardware containing a pattern of bits representing such set, provided, however, the term "software" does not mean or include the medium.

Redvision shall charge for the repair of all product returned out of warranty. Call Redvision customer service +44 (0)1420 448 448 for an RMA number or visit www.redvisioncctv.com for more information.

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